DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.15

SOURCE INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: SIR-002412
Date Inspected: 27-Feb-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Changxing Dao, Shangha

Quality Control Contact: Don Walton
Quality Control Present: ☐ Yes ☑ No
Material transfer: ☐ Yes ☐ No ☑ N/A
Sampled Items: ☐ Yes ☐ No ☑ N/A
Stock Transfer: ☐ Yes ☐ No ☑ N/A
OK to Cut: ☐ Yes ☐ No ☑ N/A
Rebar Test Witness: ☐ Yes ☐ No ☑ N/A
Delayed/Cancelled: ☐ Yes ☐ No ☑ N/A
Other: Coating Inspection
Bridge No: 34-0006
Component: Sub-Assemblies, Cross Beam #4 Lift 5 East, C
Bid Item: 77, 78, 79
Lot No: B265

Summary of Items Observed:

On this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following:

Cross Beam #4

ZPMC requested a visual and Dry Film Thickness (DFT) inspection and verification of the internal Upper portions of the stiffeners. Undercoated surfaces were inspected and found to be in general compliance with the contract documents and access scaffold removal commenced.

Sub-Assemblies

Suspender Bracket # 34W was re-abrasive blasted to amend excessive Interzinc 22 (DFT) undercoat of an area of approximately 200mmX200mm which exhibited “Mud crack” Interzinc 22 undercoat was re-applied to affected area to amend repair.

Office

Relocation to satellite office near Paint shop #1 transport all Coatings related documentation and reset up office and coatings related documentation.

Sub-Assemblies

Base metal surfaces of catwalk rail support channel iron and cable tray assemblies were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 applied. These components are designated for Cross Beam #4.

Sub-Assemblies

Testing was performed on Interzinc 22 undercoated surfaces prior to “Mist” coat application with Interfine 979. Chloride values were observed 10µs/cm and MEK testing on surfaces exhibited a 5 rating. The following

components underwent testing : SB 30 E&W, SB 32 E&W, SB 34 E&W, Counterweights 30 & 34, Cross Beam #4 Bottom Plate repair areas, and 4 sample panels. Mist coat was applied after subsequent testing performed.

Sub- Assemblies

Interzinc 22 undercoated surfaces of 24 Wind Vortex Plates were visually inspected for compliance with the contract documents. Dry Film Thickness readings were obtained and it was discovered that the (DFT) readings were in excess of the requirements of the contract for faying surfaces. ZPMC removed all the Wind Vortex Plates and re-abrasive blasted the previously applied Interzinc 22 off of the base metal and re-applied Interzinc 22 undercoat.

Sub-Assemblies

Base Metal surfaces of 4 Bikeway cantilever brackets were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 undercoat applied. Bikeway codes: BK001-022, BK001-018, BK001-023, BK001-024. Concurrent with this inspection approximately 230 pieces of various splice plate base metal surfaces were abrasive blasted to an SSPC SP-10 condition and Interzinc 22 undercoat applied.

Lift 5 East

Internal repairs were performed from Panel Points 33-34 and 34-35 of the Side and Bottom Plate “T” Stiffener areas which comprised of re-abrasive blasting previously undercoated surfaces to base metal and an SSPC SP-10 condition on exposed visibly rusted surfaces and also abrasive blasting to remove rust stain on previously undercoated surfaces and re-application of Interzinc 22 undercoat. Dehumidification was employed to control atmospheric conditions conducive to application of specified coating.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

Summary of Conversations:

No relevant conversations on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (858) 699-9549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer